

**REMARKS/ARGUMENTS**

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 3, 4 and 6-9 are pending in the present application. Claims 3 and 6-9 have been withdrawn by the Examiner and Claim 4 has been amended by the present amendment.

In the outstanding Office Action, Claim 4 was rejected under 35 U.S.C. § 103(a) as unpatentable over Goswami et al. (U.S. Patent 5,687,706, herein "Goswami") in view of Perry et al. (U.S. Patent 4,142,576, herein "Perry").

Claim 4 has been amended for clarification. No new matter is added thereby.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Goswami and Perry. This rejection is respectfully traversed.

Claim 4 is directed to a heat storage device that includes *inter alia* a heat transport device that executes an injection and an extraction of heat between inside of a heat storage tank and outside by inflow and outflow of a heat transfer medium. The heat transport device is disposed to execute a heat transport between a central portion in the heat storage tank and outside.

As indicated in the outstanding Office Action, Goswami does not disclose "... a heat transport device which execute an injection and an extraction of heat between the inside of the heat storage tank and the outside by the inflow and the outflow of said heat transfer medium, said heat transport device being disposed so as to execute a heat transport between the central portion in said heat storage tank and the outside ..." as recited in Claim 4 of the present application.

Moreover, Perry discloses a pipe 14 including a heat exchange liquid such as water, anti-freeze additive added water and Brine and a pipe 12 including a refrigerant fluid such as Freon (see column 3, lines 31-33, lines 52-53 and line 65 to, column 4, line 3). Heat is

transferred between the pipe 14 and the underground as a heat source or a sink (earth, soil) (see column 2, lines 46-51, and column 4, lines 25-30). The heat supplied from the underground to the pipe 14 is transferred to the refrigerant in the pipe 12 by the heat exchanger 13 (see column 3, lines 50-53). In return, a heat pump 11 heats a conditioned air space (see column 3, lines 33-35). However, Perry also does not disclose "... a heat transport device which execute an injection and an extraction of heat between the inside of the heat storage tank and the outside by the inflow and the outflow of said heat transfer medium, said heat transport device being disposed so as to execute a heat transport between the central portion in said heat storage tank and the outside ..." as recited in Claim 4 of the present application. Specifically, the heat transfer medium as recited in Claim 4 of the present application is charged into a heat storage device for storing heat supplied from outside. The inflow and outflow of the heat transfer medium is performed by a heat transport device for a heat transport between a central portion of the heat storage device and outside. However, Perry does not disclose that the inflow or outflow of the underground (earth, soil) is performed.

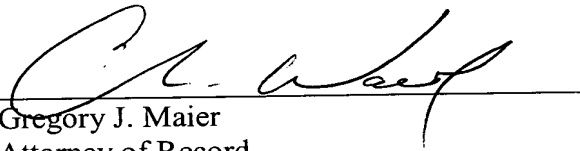
Because neither Goswami nor Perry discloses the heat transport device as recited in Claim 4 of the present application, even the combined teachings of these cited references are not believed to render the apparatus as recited in Claim 4 of the present application obvious.

Application No. 09/995,565  
Reply to Office Action of August 27, 2003

In view of the above discussion and the present amendment, Applicant respectfully submits that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Gregory J. Maier  
Attorney of Record  
Registration No. 25,599

Customer Number  
22850

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
GJM/CDW/GS:fm  
I:\ATTY\AKY\21S\216369\AME 3.DOC

Christopher D. Ward  
Registration No. 41,367